

## New African Membracidae (Hemiptera: Homoptera)

by

A. L. CAPENER

Plant Protection Research Institute, Pretoria

The following new species of Membracidae from equatorial and southern Africa are described and figured: *Beaufortiana abnormalis*, *Matonotus improvisus*, *Tricoceps natalicum*, *Acanthophyes decens*, *Distantobelus kaokoensis*, *Hamma spinosum*, *H. ugandaensis*, *H. robustum*, *Barsumas basilicus*.

Nine new species of Membracidae from the Congo, Uganda, the Central African Republic, South and South West Africa are described here. They are from the collections of the Musée Royal de l'Afrique Centrale, Tervuren (M.R.A.C.), the South African Museum (Natural History), Cape Town (S.A.M.), and the National Collection of Insects of the Plant Protection Research Institute, Pretoria (N.C.I.). All measurements are in mm.

### CENTROTINAE

#### LEPTOCENTRINI

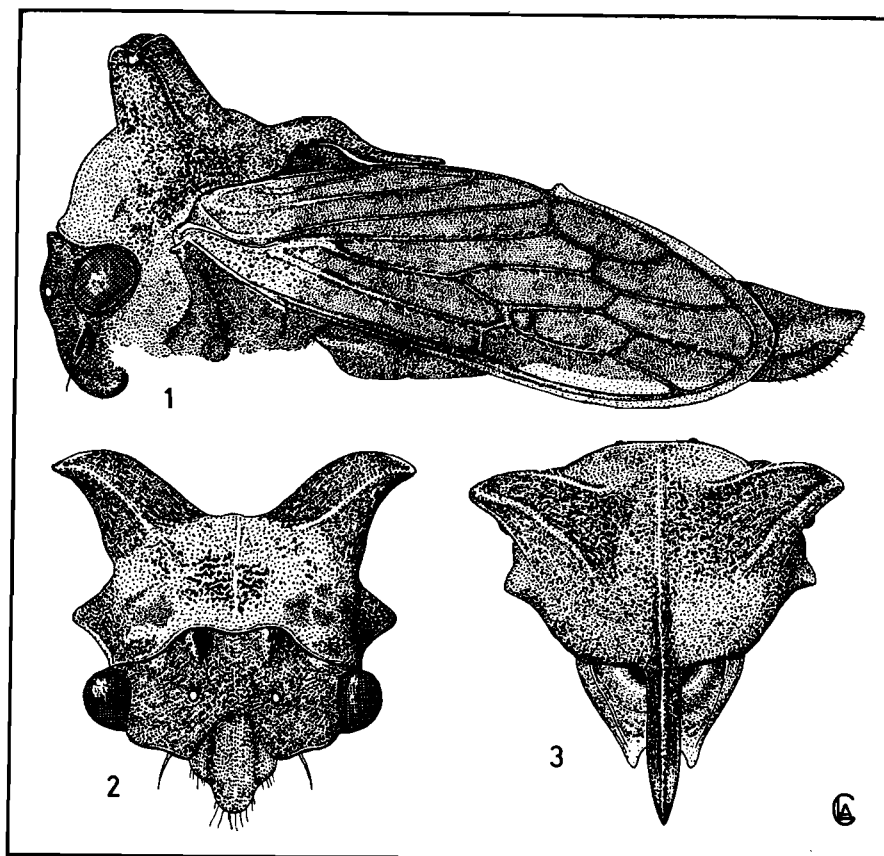
#### *Beaufortiana abnormalis* spec. nov., figs 1, 2, 3

Differing from the two previously recorded species of this genus (*cornuta* Distant, 1916, and *viridis* (Capener), 1952) in the abbreviated posterior process which is not ampliate.

**FEMALE.** Head vertical; vertex 1.5 times wider than long, black, moulded with a strong swelling above each ocellus on upper margin, finely and densely punctate with very short adpressed hairs, upper margin strongly arcuate and sinuate, lower margins carinate and very weakly sinuately sloping to frontoclypeus; eyes hemispherical, succineous; ocelli succineous, about equidistant from eyes and from each other and situated about on the centro-ocular line; frontoclypeus brownish ochraceous, punctate, about as long as wide across lobes which extend about two-thirds its length and are more gently rounded than in *cornuta* and *viridis*, their sutures strong and blackish, tip rounded with whitish pilosity; antennae brownish ochraceous.

Pronotum brownish ochraceous shading to blackish above humeral angles and on horns, puncturation black, variable in size and density, strongest above humeral angles, on horns and in middle of metopidium, median carina percurrent, metopidium wider than high, a little backwardly curving into disc, frontal margin not obumbrant, receding a little to inner supraocular callosities which are brown and impunctate; humeral angles prominent and blunt, posterior angles obtuse, posterior margin transverse. Suprahumeral horns robust, about as long as distance between their bases, directed upwards a little outwards and slightly forwards, tricarinate, tips acute and a little outwardly decurved, dorsal surface a little convex with a slight depression basally towards

anterior carina, lateral surface weakly convex, posterior surface almost planate. Posterior process very short, about as long as width of scutellum, emerging dorsally behind disc and ventrally from posterior margin, contiguous with scutellum and margins of tegmina, extending to a point between 1st and 2nd anal veins, gradually acuminate and rather weakly tricarinate, tip blunt. Scutellum nearly twice as wide as long, basally strongly swollen, from dorsal aspect with a black semicircular depression, tip broadly concavely emarginate, apices acute, basally brownish becoming ochraceous at tip, punctate. Tegmina three times as long as wide, hyaline, basal fifth pale ochraceous coriaceous, veins beyond basal area varying in shade between pale and dark brown and margined with thickish white hairs, five apical and two discoidal cells with a tendency towards the production of spurious cross-veins, apical limbus moderately broad, tip rounded. Legs basally black to brown, tips of tibia ochraceous, tarsi paler, fore and middle tibia indistinctly banded with blackish and hind tibia more generally sprinkled with blackish. Abdomen brown, extending beyond tips of tegmina.



Figs 1-3. *Beaufortiana abnormalis* spec. nov., ♀. 1. lateral aspect. 2. frontal aspect. 3. dorsal aspect.

MALE. Unknown.

Host plant thought to be *Lycium* sp.

*Measurements*: length, frontal margin to tip of abdomen 6.35–6.55, to tips of tegmina 5.61–5.95, to tip of posterior process 3.10–3.24; width, across tips of horns 2.77–2.97, at humeral angles 2.51–2.58, at eyes 2.31–2.38.

*MATERIAL EXAMINED*. Four females: holotype ♀ and 2 ♀ paratypes, Nuwerus, Namaqualand, 14.ix.1967; 1 ♀ paratype, 19 miles N.N.E. Nieuwoudtville, C.P., 6.ix.1968, H. D. Brown. Holotype and paratypes in N.C.I.

#### CENTROTINI

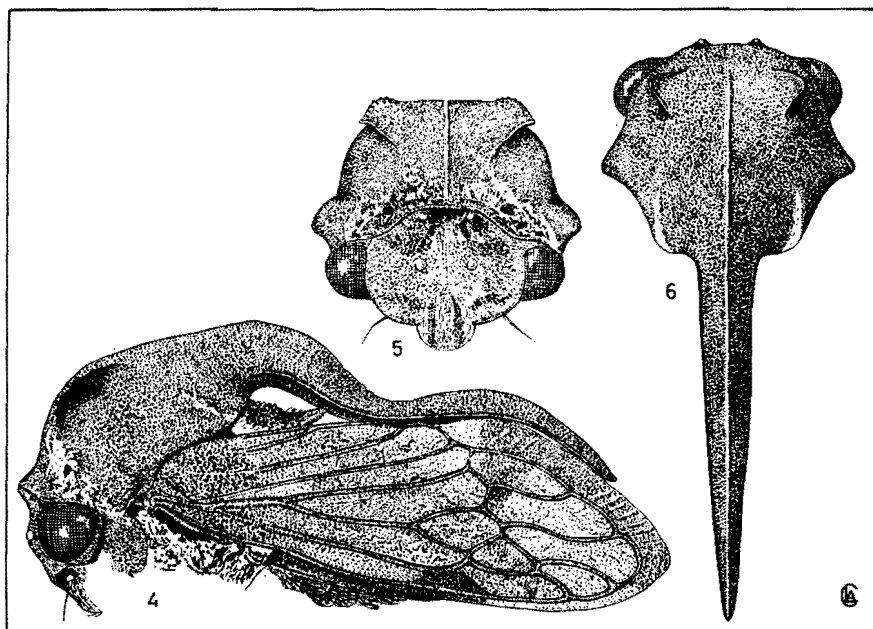
#### *Matonotus improvisus* spec. nov., figs 4, 5, 6

The genus *Matonotus* is represented by a single species, *M. granulatus* Capener (1954b), which is so far known only from the female holotype from Mato, Congo. It has been shown many times before that striking cases of sexual dimorphism are not uncommon in African Membracidae, and it is possible that the specimen from which this new species is described may be a male of *granulatus*. In the absence of more material or other evidence it is not possible to assert that this is indeed the case, and for the present it is deemed advisable to regard it as a distinct species.

**MALE**. Head vertical, twice as wide as long; vertex about 1.4 times wider than long, very strongly moulded, dark castaneous brown, finely punctate with short adpressed hairs; upper margin strongly arcuate with a prominent swelling above each ocellus, lower margins crenate and convexly sloping to frontoclypeus; eyes dull succineous, ocelli pale succineous, distinctly closer to each other than to the eyes, and situated very slightly above the centro-ocular line; frontoclypeus about as wide as long, extending in a semicircle about half its length below lower margins of vertex with lobes entirely fused; rostrum extending as far caudad as fourth abdominal sternite; antennae castaneous.

Pronotum strongly convex, dark castaneous, finely punctate with short adpressed golden hairs and sparse white tomentum on metopidium and posterior angles, median carina percurrent, frontal margin broadly obumbrant and sloping, humeral angles robustly prominent and blunt, posterior angles obtusely rounded, posterior margin transverse and a little arcuate over base of scutellum. Metopidium wider than high, convex and a little backwardly sloping, supraocular callosities a little depressed and somewhat obscure. Suprahumeral horns anterior to humeral angles, very short, compressed and subtriangular, not raised above level of disc, frontally oblique, extending outwards about as far as margins of eyes, tricarinate, anterior and posterior carinae moderately strong and uniting in a roundly acute angle, lateral carina very short and almost horizontal. Posterior process basally very robust, emerging from disc and posterior margin and curving very slightly above level of disc and a little distant from scutellum, downwardly curved and almost impinging on apex of scutellum, continuing sinuately following curve of tegmina to tip, extending beyond extremity of abdomen but not quite reaching tips of tegmina, basally convexly tectiform rapidly becoming planately tectiform and gradually acuminate to acute tip, strongly tricarinate with a weak medio-ventral carina. Scutellum triangular, wider than long, basally convex and swollen, tomentous at basal angles and along lateral margins, tip broadly concavely emarginate.

Tegmina nearly three times as long as wide, clear hyaline, basal fourth coriaceous castaneous and punctate, veins castaneous, pterostigma large, castaneous coriaceous, apical limbus broad, brownish hyaline with a brown fascia extending from margin at fifth apical to base of fourth, five apical and two discoidal cells. Sides of thorax lightly tomentose, legs castaneous. Abdomen dark castaneous with posterior margins of sternites whitish.



Figs 4-6. *Matanotus improvisus* spec. nov., ♂. 4. lateral aspect. 5. frontal aspect. 6. dorsal aspect.

*Measurements*: length, frontal margin to tips of tegmina 6·6, to tip of posterior process 5·9; width at tips of horns 1·63, at humeral angles 2·48, at eyes 2·33.

*MATERIAL EXAMINED*. ♂ holotype, Elizabethville, Congo, Oct. 1911, Mission Agric., in M.R.A.C.

***Tricoceps natalicum* spec. nov., figs 7, 8, 9**

Nearest to *T. canus* Capener (1953), but smaller, with anterior margins of horns more sweepingly curved and apices dorsoventrally compressed. Differing from *imperialis* Capener (1953) in the almost untinted tegmina, less elongate pterostigma and less elevated apically compressed horns.

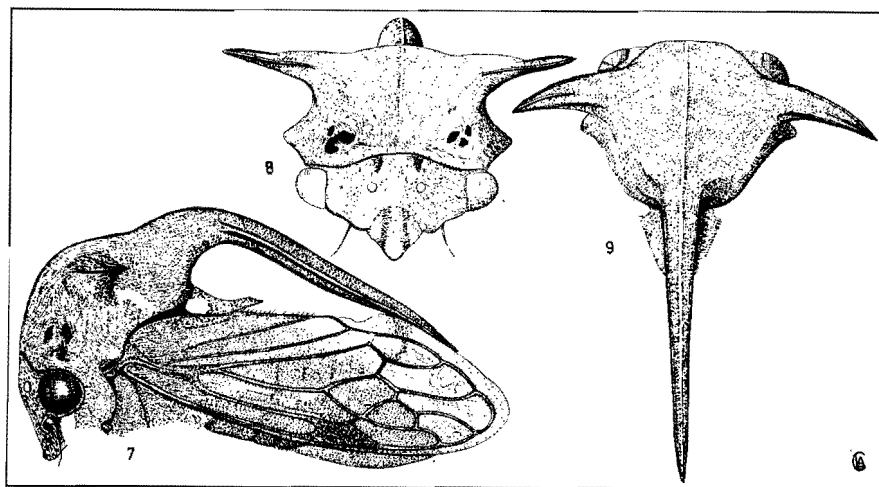
*FEMALE*. Head vertical; vertex nearly twice as wide as long, subplanate and a little moulded, black, very finely punctate with adpressed golden hairs; upper margin arcuate and weakly sinuate, lower margins sinuately sloping to frontoclypeus and a little forwardly projecting; eyes dull brownish amber, ocelli large, succineous, about

equidistant from each other and from eyes and situated slightly above the centro-ocular line; frontoclypeus about as wide as long, obscurely lobate with impunctate sutures, extending about half its length below lower margins of vertex, slightly declivous, tip slightly prominent and acutely rounded, rostrum extending to posterior coxae.

Pronotum black, finely punctate with adpressed pale golden hairs and a narrow white tomentose streak from base of horn to posterior angle, median carina almost obsolete, metopidium wider than high, vertical, convex, supraocular callosities large and impunctate; humeral angles prominent, subacute, posterior angles strongly rounded, posterior margin transverse and slightly arcuate over base of scutellum. Suprahumeral horns horizontal, apically dorsoventrally compressed, sharply acute and quadricarinate, anterior carina sweeping outwards and gently curving backwards, lateral and posterior carinae curving gently backwards about in same vertical plane, dorsal carina very short bisecting tip. Posterior process basally robust and suboval in section, emerging from behind disc and vertically from posterior margin, rising above level of disc and directed declivously backwards high above scutellum, impinging on tegmina at anal angle and extending as far caudad as tip of abdomen, quadricarinate and acuminate to sharp tip, dorsal and lateral carinae strong, ventral carina weak. Tegmina nearly three times as long as wide, subhyaline, basal sixth coriaceous, blackish, punctate with adpressed golden hairs, pterostigma coriaceous, suboval, veins brown but not strongly raised, a brownish black macula inwards from anal angle, apical limbus moderately broad. Sides of thorax black with adpressed golden hairs and patchily tomentose. Legs black with tibiae and tarsi brown. Scutellum triangular, about as wide as long, basally a little swollen with white tomentum at lateral angles, black, finely punctate with adpressed golden hairs, apex roundly emarginate, apices sharp. Abdomen black, tergites with a greyish bloom, sternites with golden pilosity.

MALE. Similar to female.

Host plant unknown.



Figs 7-9. *Tricoceps natalicum* spec. nov., ♀. 7. lateral aspect. 8. frontal aspect. 9. dorsal aspect.

*Measurements*: length, frontal margin to tips of tegmina ♂ 5.58, ♀ 5.85–6.33, to tip of posterior process ♂ 4.69, ♀ 5.68–5.80; width, across horns ♂ 3.62, ♀ 4.22–4.52, at humeral angles ♂ 2.41, ♀ 2.63–2.70, at eyes ♂ 2.11, ♀ 2.36–2.41.

**MATERIAL EXAMINED.** Four females, one male: ♀ holotype, ♂ allotype, and two ♀ paratypes from Hluhluwe, Zululand, 18.xi.1957, J. W. Hunt; 1 ♀ paratype from Umgababa, Natal, 8.iii.1951, A. L. Capener, in N.C.I.

***Acanthophyes decens* spec. nov., figs 10, 11, 12, 13**

Near *A. linnavoorii* Capener (1968), but differing in the broader more elevated suprahumeral horns. A sexually dimorphic species, the horns of the male being much shorter than those of the female.

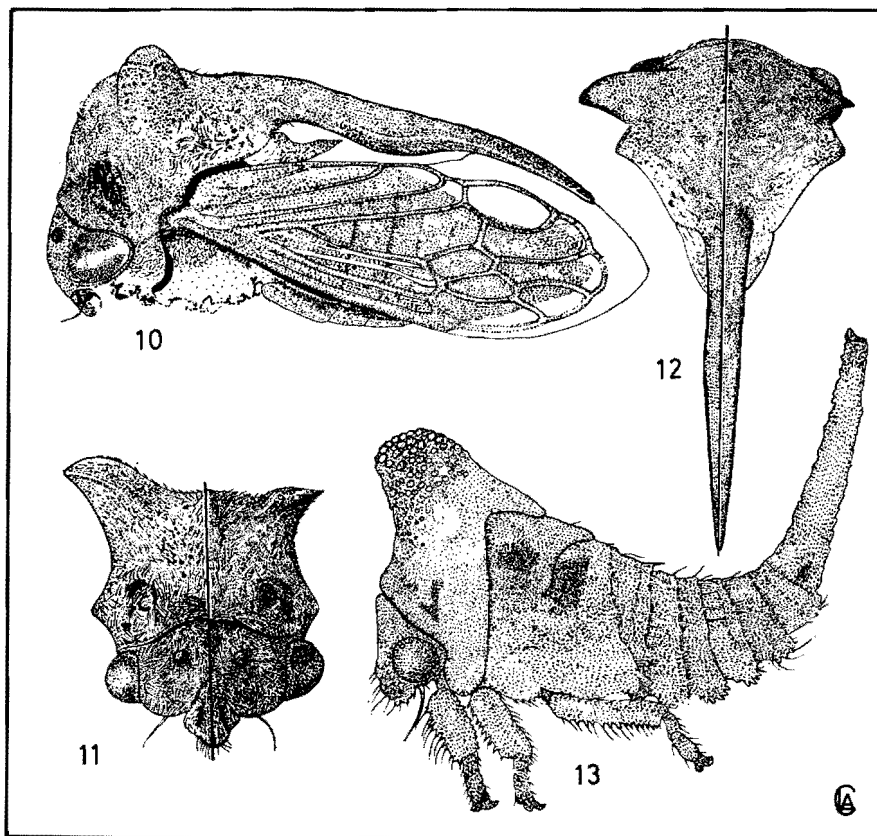
**FEMALE.** Head vertical; vertex about twice as wide as long, black, convex, finely punctate with short adpressed pale golden hairs; upper margin arcuate and a little sinuate, lower margins horizontally curved to frontoclypeus; eyes brown, a little elongate from lateral aspect, ocelli brown, slightly closer to eyes than to each other and situated above the centro-ocular line; frontoclypeus declivous, about as wide as long, lobes sloping towards tip, sutures distinct, pilose, tip narrowly rounded; antennae brown.

Pronotum dark brown, punctate with adpressed pale golden hairs, somewhat tomentose below and behind horns, median carina percurrent. Metopidium vertical, about twice as wide as high, blackish on lower third, supraocular callosities irregular, black; humeral angles prominent and blunt, posterior angles obtusely rounded, posterior margin transverse and a little arcuate over base of scutellum. Suprahumeral horns about as long as distance between their bases, extending outwards and upwards a little above level of disc, tips acute and weakly tricarinate, all surfaces convex, anterior margin a little curved, posterior margin straight. Posterior process emerging horizontally from behind disc and rising very slightly from posterior margin, a little distant from scutellum and almost impinging on its tip, slightly ventrally amplate in middle, apical third acuminate, impinging on and following curve of tegmina, tricarinate, tip sharp and extending caudad about as far as extremity of abdomen. Tegmina about 2.5 times longer than wide, clear hyaline, basal seventh coriaceous and punctate, veins yellowish and margined with fine hairs, pterostigma very small and not absorbing R1, limbus broad, tip acutely rounded. Sides of thorax black covered with dense white tomentum. Legs basally black, tibiae and tarsi dark brown. Scutellum triangular, wider than long, basally a little swollen with white tomentum at basal angles, punctate, tip upturned and broadly concavely emarginate. Abdomen black, strongly punctate, tergites covered with greyish bloom, sternites densely covered with whitish hairs.

**MALE.** Somewhat darker than female, with shorter more acute horns which do not extend beyond humeral angles and are sometimes scarcely more than prominences, posterior process extending slightly beyond tip of abdomen.

*Measurements*: length, frontal margin to tips of tegmina ♂ 4.29–4.42, ♀ 4.69–4.82, to tip of posterior process ♂ 3.63–4.02, ♀ 4.16–4.42; width across tips of horns ♂ 1.45–2.04, ♀ 1.91–2.54, at humeral angles ♂ 1.72–1.92, ♀ 1.78–2.04, at eyes ♂ 1.63–1.66, ♀ 1.63–1.72.

**NYMPH.** Last instar: in life green, pronotal crest brown to black, tip of anal tube and legs brownish orange, wing buds yellowish. Head vertical, more than twice



Figs. 10-13. *Acanthophyes decens* spec. nov., ♀. 10. lateral aspect. 11. frontal aspect. 12. dorsal aspect. 13. nymph, lateral aspect.

as wide as long, upper margin of vertex arcuate, lower margins concentrically curved and fringed with tuberculate hairs, produced below eyes as a rounded expansion. Pronotum twice as high from frontal margin as length of vertex, in profile resembling a Phrygian cap, crest with short dense tubercles, produced caudally in a short acuminate process over half mesonotum, suprahumeral buds almost obsolete. Mesonotum broadly caudally expanded over about half metanotum, wing buds bulged at base of subcosta and fringed with tuberculate hairs. Legs with anterior margins of tibiae similarly fringed. Abdomen with a pair of lateral lamellae on segments two to seven, each fringed with tuberculate hairs, anal tube finely tuberculate, as long as height of pronotum.

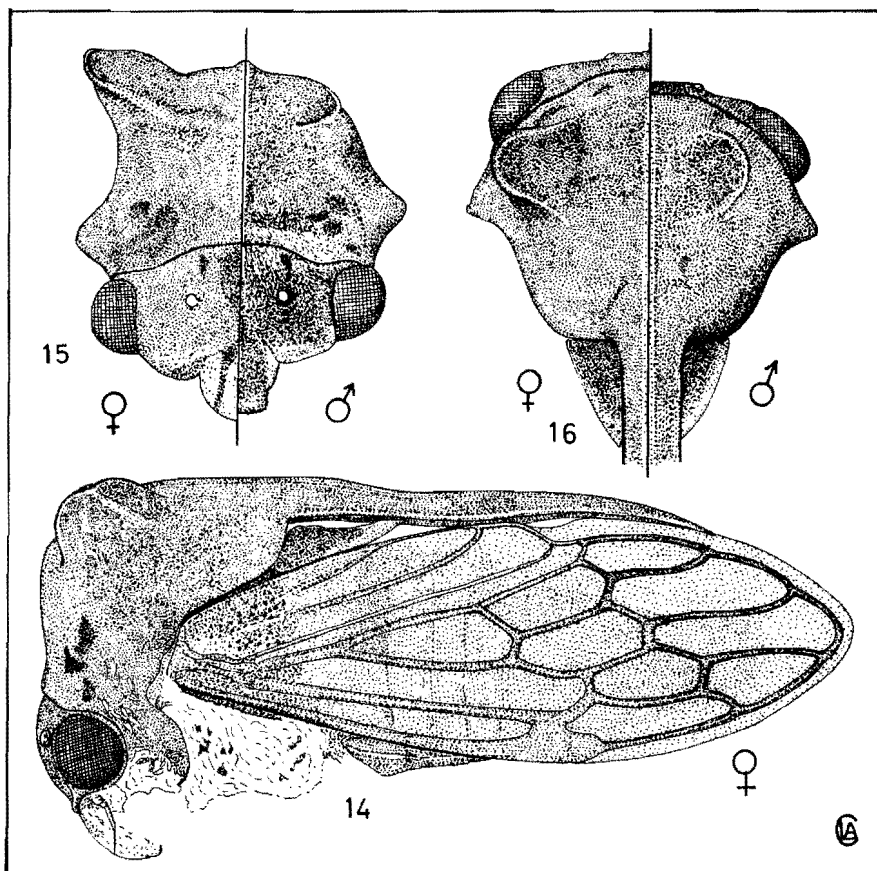
Host plant *Polygala leptophylla* Borsch.

**MATERIAL EXAMINED.** Twelve females, four males and two nymphs: ♀ holotype, 4 ♂ and 11 ♀ paratypes, farm Vaalbank, Philippolis, O.F.S., South Africa, 22-29.xi.1969, A. L. Capener, in N.C.I.

***Distantobelus kaokoensis* spec. nov., figs 14, 15, 16**

This species is nearest to *D. sericeus* (Capener) (1951), from which it differs in the almost straight posterior process, the more horizontal horns in the female and the presence of distinct lunate suprahumeral carinae in the male. General colour castaneous with dense white tomentum on sides of thorax.

**FEMALE.** Head vertical: vertex about 1.5 times wider than long, very weakly convex, finely punctate with somewhat sparse white tomentose hairs densest above lower margin, a black median vertical macula, upper margin arcuate and sinuate, lower margins curving a little obliquely to frontoclypeus; eyes dull succineous, ocelli succineous, closer to eyes than to each other and situated slightly above the centro-ocular line; frontoclypeus slightly declivous, a little longer than wide across lobes which are largely concealed by white tomentum, tip rounded.



Figs 14-16. *Distantobelus kaokoensis* spec. nov. 14. ♀, lateral aspect. 15. ♂ and ♀, frontal aspect. 16. ♂ and ♀, dorsal aspect.



Pronotum finely punctate with sparse pubescence, median carina strongly percurrent and ochraceous on metopidium, humeral angles prominent and ochraceous, posterior angles rounded, posterior margin transverse and slightly arcuate over base of scutellum; metopidium vertical, about twice as wide as high, frontal margin not obumbrant, supraocular callosities slightly depressed. Suprahumeral horns short and robust, extending upwards and outwards, tricarinate, tips rounded, anterior carina basally ochraceous, lateral carina weak, dorsal and lateral surfaces weakly convex, posterior surface planate. Posterior process emerging horizontally from disc and posterior margin, just clearing scutellum and impinging on its tip and margins of tegmina, and very slightly decurved and acuminate to sharp tip which extends to about fourth apical cell, tricarinate, triangular in section. Tegmina nearly three times as long as wide, hyaline, basal sixth coriaceous and punctate, pterostigma rather small, three subapical cells, veins and pterostigma ochraceous brown, apical veins darker, apical limb narrow, tip somewhat acutely rounded. (There is no subapical cell at base of third apical cell and it appears not to be a valid generic character.) Sides of thorax covered with dense white tomentum; legs ochraceous brown, darker basally. Scutellum triangular, wider than long, darker brown than pronotum, apex ochraceous, basally very slightly convex, tip deeply emarginate, apices acute. Abdomen greyish and strongly punctate above, castaneous below, terminalia darker.

MALE. Without suprahumeral horns, which are replaced by semicircular carinae; vertex, frontoclypeus and supraocular callosities black, otherwise similar to female.

*Measurements*: length, from frontal margin to tips of tegmina ♂ 3.96–4.03, ♀ 4.49–4.69, to tip of posterior process ♂ 3.30, ♀ 3.90–4.22; width at suprahumeral carinae ♂ .97, at horns ♀ 1.58–1.85, at humeral angles ♂ 1.78, ♀ 1.98, at eyes ♂ 1.58, ♀ 1.78.

Host plant unknown.

MATERIAL EXAMINED. Six females and two males: ♀ holotype, ♂ allotype, 1 ♂ and 5 ♀ paratypes, collected by the South African Museum Expedition to South West Africa at Kaokoveld Otavi, March 1926. Holotype, allotype and three ♀ paratypes in S.A.M., 1 ♂ and 2 ♀ paratypes in N.C.I., Pretoria.

***Hamma spinosum* spec. nov., figs 17, 18, 19**

Nearest to *H. grahami* (Distant) (1916), but suprahumeral spines not basally bulbous and pronotum covered with subconical tubercles.

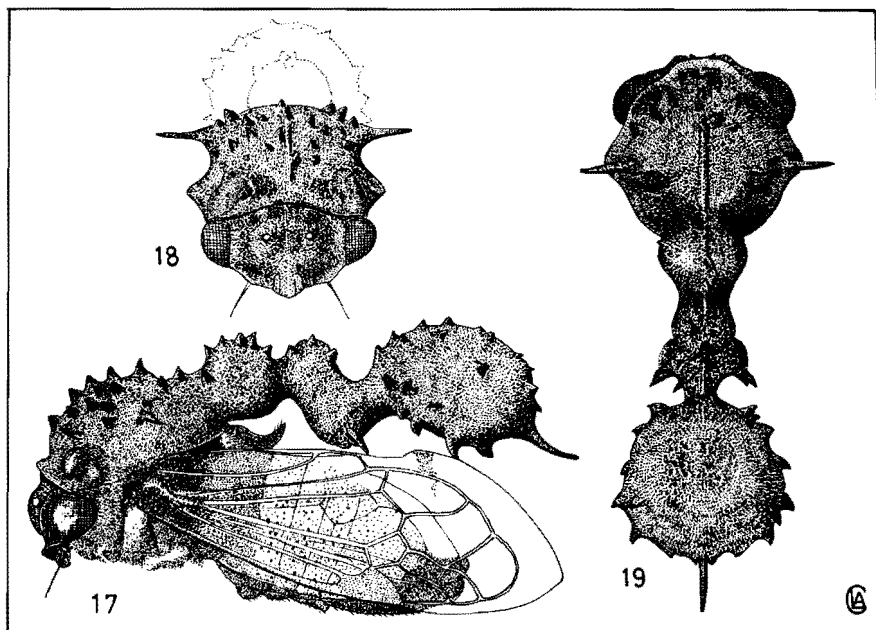
FEMALE. Head vertical; vertex about 1.5 times wider than long, shining black, strongly moulded, medially vertically depressed between ocelli with a very weak carina, finely punctate without pilosity; upper margin shallowly arcuate and sinuate, lower margins sinuately curved to frontoclypeus and a little upturned; eyes subhemispherical, pale succineous, closer to eyes than to each other and situated above the centro-coular line; frontoclypeus about as wide as long, declivous, lobes entirely fused, tip broadly rounded; antennae brownish.

Pronotum shining black, finely punctate without pilosity, covered with subconical tubercles on disc, metopidium and posterior process, each tubercle terminating in a short bristle, median carina obsolete on terminal node otherwise percurrent, frontal margin obumbrant; metopidium twice as wide as high, convex, supraocular callosities impunctate and strongly convex, humeral angles prominent and blunt, lateral and

posterior margin broadly curved, posterior margin not arcuate over base of scutellum. Suprahumeral horns represented by rather long slender horizontal (or a little downwardly sloping) spines extending outwards beyond humeral angles, at their bases dorsally (usually) three conical tubercles. Posterior process large, trinodate, the first subglobose, the second more elongate and obliquely descending, the third subglobose and almost as large as thorax, emerging from behind disc and just above posterior margin, rising clear of scutellum, second node impinging on margins of tegmina then rising a little to terminal node, the apex of which is produced in a slightly curved spine which extends as far as tips of tegmina; ventrally with a rather broad median carina extending from first node to tip; dorsally with scattered subconical tubercles, mostly backwardly directed; latero-ventrally with two strong tubercles at apex of median node on each side, and several on terminal node. Tegmina about 2.75 times longer than wide, clear hyaline, basal sixth black coriaceous and punctate, pterostigma fulvous to pale brownish coriaceous, broad, absorbing R1; veins very pale fulvous to almost colourless, a small brownish macula on limbus at anal angle sometimes running into fifth apical cell, apical limbus broad. Sides of thorax black with scattered white tomentum; legs basally black to dark brown, tarsi and apical half of tibiae fulvous. Scutellum triangular, wider than long, black, strongly medially swollen at base, a tuft of long pale hairs at basal angles, tip upturned and strongly concavely emarginate, apices acute.

MALE. Similar to female.

Host plants *Mallotus oppositifolius* and *Hibiscus calyphyllus* Cav. (= *H. owariensis*). Recorded by M. Boulard in RCA.



Figs 17-19. *Hamma spinosum* spec. nov., ♀. 17. lateral aspect. 18. frontal aspect. 19. dorsal aspect.

*Measurements*: length, ocellus to tips of tegmina ♂ 4.29–4.89, ♀ 4.62–5.28, ocellus to tip of posterior process ♂ 4.22–4.89, ♀ 4.62–5.48; width at tips of suprahumeral spines ♂ 1.66–1.81, ♀ 1.99–2.42, at humeral angles ♂ 1.42–1.51, ♀ 1.51–1.84, at eyes ♂ 1.33–1.39, ♀ 1.39–1.52, width of terminal node ♂ 1.12–1.42, ♀ 1.06–1.59.

**MATERIAL EXAMINED.** Seven males and eighteen females: ♀ holotype, Rutshuru, Congo, 11.v.1936, L. Lippens; ♂ allotype, Rutshuru, Dec.1937, J. Ghesquière; 6 ♂, 17 ♀ paratypes: CONGO, Rutshuru, 7.iv.1937, 1 ♂, 3 ♀, Mission Prophylactique; Mayidi, 1942, 2 ♀, Rev. P. Van Eyen; Haut-Uele, Moto, April-July, Nov., 1 ♂, 2 ♀, L. Burgeon; Haut-Uele, Yebo, Jan. 1926, 1 ♀, L. Burgeon; Ituri, Manua (Lubutu) 27.ix.1929, 1 ♀, A. Collart; Ituri-Tyufu, 15.xi.1928, 1 ♂, A. Collart; Bumba, Dec.'39-Jan.'40, 2 ♀, H. De Saeger; Itoka, Oct.1912, 1 ♀, R. Mayné; Mundyengorui (Libumi), 4.x.1927, 1 ♀, A. Collart; Congo Mongende, 17.iv.1921, 1 ♂, H. Schouteden; Basoko, 5.i.1924, 1 ♀, Dr. J. Bequaert; Masua (Lubutu), 9.ix.1929, 1 ♀, A. Collart; Region des lacs (undated), 1 ♀, Dr. Sagona; ANGOLA, Dundo, 20.ix.1960, 1 ♀, (New Jersey Trap); UGANDA, Kawanda, 15.xi.1929, 1 ♀ (in Brit. Mus.); CENTRAL AFRICAN REPUBLIC, Boukoko, 7.ix.1966, 1 ♂, Toukoulou, 23.x.1967, 1 ♂, M. Boulard. Holotype, allotype and paratypes in M.R.A.C., paratypes in N.C.I.

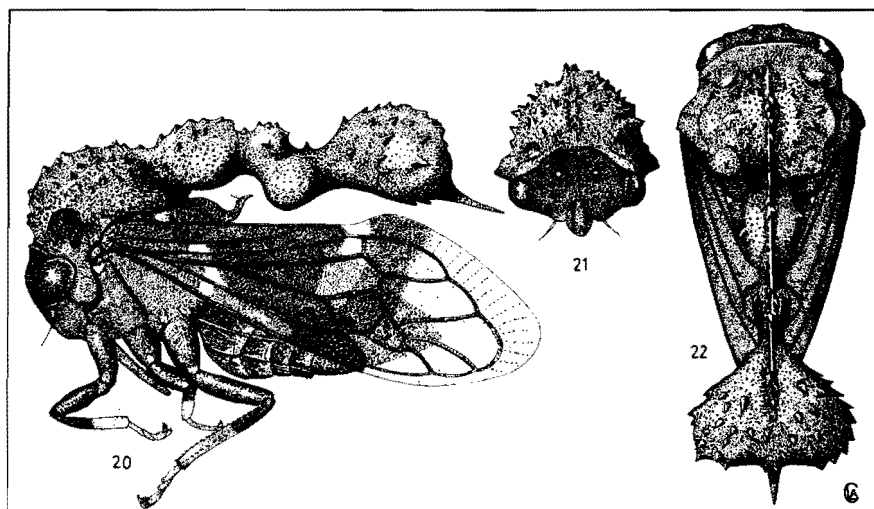
***Hamma ugandensis* spec. nov., figs 20, 21, 22**

Nearest to *H. pattersoni* Distant (1916), but differing in the large heart-shaped terminal node of the posterior process, the more elongate pterostigma, the dark markings of the tegmina and its larger size.

**FEMALE.** General colour black to the naked eye, very dark brown under illumination.

Head vertical; vertex about 1.33 times wider than long, black, finely punctate with micro-hairs, somewhat moulded, upper margin arcuate and sinuate, lower margins a little sinuately sloping and curving to frontoclypeus; eyes vitreously brownish, ocelli rather small, opalescent, closer to eyes than to each other and situated a little above the centro-ocular line; frontoclypeus longer than wide, a little declivous, lateral lobes rather narrow extending to tip and entirely fused, tip rounded, rostrum brown with base black, extending to posterior coxae.

Pronotum very dark brown with somewhat pointed tubercles, finely punctate with micro-hairs, median carina percurrent, disc convex and without suprahumeral horns or spines, metopidium vertical, about twice as wide as high, frontal margin obumbrant, supraocular callosities convex, humeral angles prominent, posterior angles rounded, a slight swelling just anterior to posterior angles and about in line with basal angles of scutellum. Posterior process emerging behind disc and from posterior margin, trinodate, not touching scutellum, apical node large, heart-shaped and almost as wide as pronotum at humeral angles, terminating in a sharp spine which extends beyond tip of abdomen and almost reaches tips of tegmina, with a median ventral carina. Tegmina about three times as long as wide, hyaline, basal eighth dark brown coriaceous and punctate, veins brown, paler apically, pterostigma a little more than twice as long as wide, dark brown, a dark macula from anal margin across discal area and from anal angle to pterostigma, apical limbus very broad, apex somewhat acutely rounded. Legs black with apical half of tibiae and tarsi ochraceous. Scutellum dark brown to black, a little wider than long, a little swollen in middle at base, basal angles with a small tomentous white spot, tip upturned, broadly shallowly emarginate and fringed with



Figs 20–22. *Hamma ugandensis* spec. nov., ♀. 20. lateral aspect. 21. frontal aspect. 22. dorsal aspect.

erect pale golden hairs, apices a little decurved. Abdomen below brownish black with short golden pubescence and posterior margins of sternites ochraceous.

MALE. Unknown.

*Measurements*: length, frontal margin to tips of tegmina 5·08, to tip of posterior process 4·56; width across humeral angles 1·92, at eyes 1·59.

*MATERIAL EXAMINED*. ♀ holotype, Uganda, Mulange, Dec. 1922, coll. M. Dummer, in S.A.M.

***Hamma robustum* spec. nov., figs 23, 24, 25**

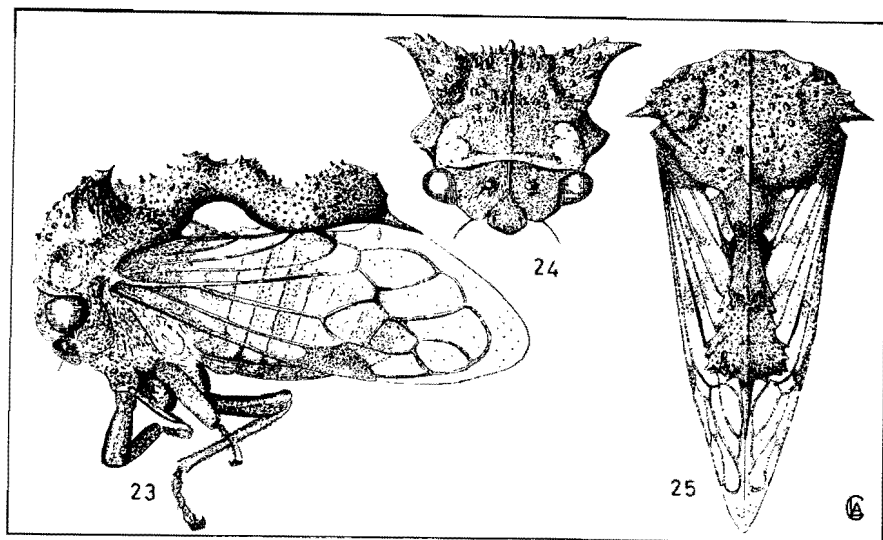
Differing from all previously described species of this genus in its more robust form and more conical horns.

**FEMALE**. Head vertical; vertex twice as wide as long, black, strongly moulded, punctate with adpressed golden hairs, with a medial vertical carina, upper margin shallowly arcuate and a little sinuate, lower margins sloping and rounded to frontoclypeus; eyes globose, brownish, ocelli succineous, prominent and a little oblique, closer to eyes than to each other and situated slightly above the centro-ocular line; frontoclypeus declivous, extending about half its length below lower margins of vertex, lobes entirely fused and weakly sulcate, lateral margins parallel and sloping to rounded tip, rostrum extending to posterior coxae; antennae brown.

Pronotum dark brown, tuberculate, deeply coarsely punctate with short golden hairs, median carina percurrent; metopidium wider than high, vertical, tuberculate above, supraocular callosities convex, partially punctate, frontal margin a little obumbrant; humeral angles robust, prominent, posterior margin gently rounded.

Suprahumeral horns subconical, broadly based and swollen posteriorly, tuberculate, carinae obscure, extending slightly above level of disc and outwards beyond humeral angles, apices sharp. Posterior process emerging from behind disc and from posterior margin, rising slightly above level of disc, arching over scutellum, first two nodes above scutellum almost obsolete, terminal node very large, impinging on margins of tegmina and somewhat heart-shaped from dorsal aspect with a sharp apical spine, with conical tubercles basally, along median carina and on terminal node, without lateral carinae, extending caudad as far as extremity of abdomen. Tegmina about 2.5 times as long as wide, hyaline, basal sixth dark brown coriaceous and punctate, veins and pterostigma ochraceous brown, a large brownish suffusion on discal area and a very short brownish fascia on limbus at anal angle, five apical and two discoidal cells, apical limbus broad. Sides of thorax dark brown with sparse white tomentum; legs brown, paler on apices of tibiae and tarsi. Scutellum wider than long, dark brown with short golden pilosity, finely punctate, basal angles with a white tomentose tuft, tip deeply emarginate, apices acute, pale brown and a little upturned. Abdomen greyish and deeply punctate above, dark brown with short golden pilosity below.

MALE. Unknown.



Figs 23–25. *Hamma robustum* spec. nov., ♀. 23. lateral aspect. 24. frontal aspect. 25. dorsal aspect.

*Measurements:* length, frontal margin to tips of tegmina 5.28, to tip of posterior process 4.36; width across tips of horns 2.70, at humeral angles 2.18, at eyes 1.85.

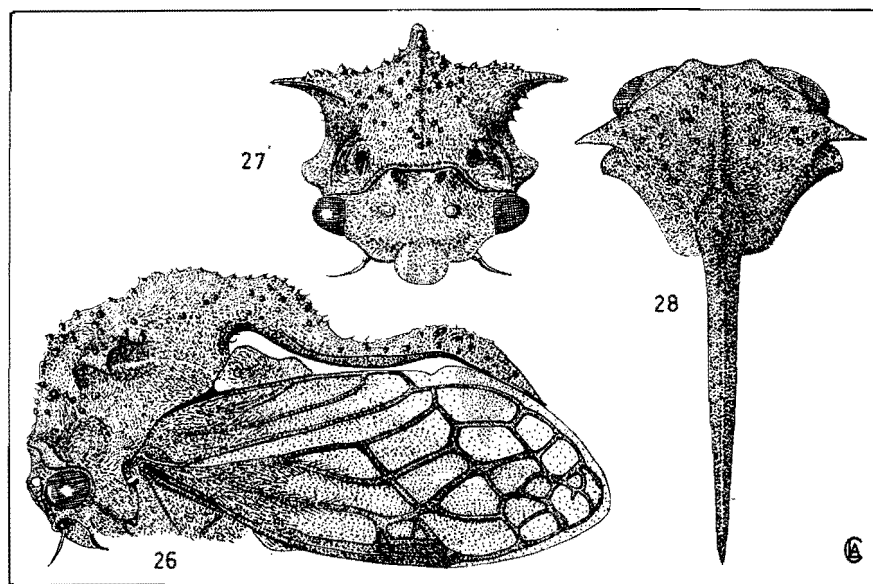
*MATERIAL EXAMINED.* ♀ holotype from Rutshuru 7.iv.1937, Mission Prophylactique, in M.R.A.C.

***Barsumas basilicus* spec. nov., figs 26, 27, 28**

Near *B. spinosus* (Capener, 1954a), but differing in the more acute supra-humeral horns, the less elevated sinuate posterior process without nodes and the very narrow apical limbus of the tegmina.

**FEMALE.** Head vertical; vertex about 1.6 times wider than long, brown, somewhat convex in middle, strongly moulded, very finely punctate with short adpressed golden hairs; upper margin strongly arcuate with prominent mounds above ocelli, lower margins sinuately downwardly sloping to frontoclypeus, slightly forwardly projecting; eyes a little elongate from frontal aspect, succineous to brown, ocelli equidistant from each other and from eyes, succineous, situated a little above the centro-ocular line; frontoclypeus a little declivous, about as long as wide, subcircular with lobes entirely fused and sutures rather indistinct, extending about half its length below lower margins of vertex, rostrum extending to posterior margins of hind coxae; antennae pale brown.

Pronotum dark brown, finely punctate with short adpressed golden hairs and a sprinkling of small tubercles on metopidium, disc, bases of horns and posterior process, rather more dense on disc, each terminating in a short bristle, frontal margin obumbrant, median carina percurrent but somewhat obscure, an almost obsolete streak of white tomentum from base of horn to posterior angle. Metopidium vertical, wider than high, somewhat depressed on each side of median line, supraocular callosities convex but rather indistinct; humeral angles prominent and blunt, posterior angles obtuse, posterior margin transverse and arcuate over base of scutellum. Suprahumeral horns subconical and basally swollen, tips horizontal, obscurely tricarinate, apically acute



Figs 26–28. *Barsumas basilicus* spec. nov., ♀. 26. lateral aspect. 27. frontal aspect. 28. dorsal aspect.

and extending outwards slightly beyond humeral angles. Posterior process robust and sinuate, emerging from behind disc and from posterior margin, rising a little above level of disc in a bicrenulate crest, a little distant from scutellum, descending and usually impinging on its apex and margins of tegmina then following their curve to a point above extremity of abdomen, tip not expanded but strongly acuminate to sharp apex, with weak lateral carinae. Tegmina somewhat sordidly subhyaline, 2·3 times as long as wide, basally brown coriaceous and pubescent, pterostigma brown, elongate, veins brown and pilose, cellular arrangement complicated by spurious veins but generally with seven apical cells, three or more subapicals and three discoidals, an irregular brown macula on limbus and seventh apical running into adjacent subapical cell, apical limbus very narrow. Sides of thorax dark brown, legs basally blackish brown, tibia and tarsi a little paler. Scutellum triangular, wider than long, brown, finely punctate with short recumbent golden hairs, base swollen with white tomentum at basal angles, tip shallowly emarginate, apices blunt. Abdomen dark brown with very short pubescence.

MALE. Unknown.

*Measurements*: length, frontal margin to tips of tegmina 5·41–5·61, to tip of posterior process 4·75–4·81; width across tips of horns 2·41–2·80, at humeral angles 2·05–2·20, at eyes 1·84–1·93.

MATERIAL EXAMINED. Four females: holotype and three paratypes from Congo, Menthogo, Irumu, March 1960, R. Badham, in N.C.I.

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